

What is Claimed is:

1. ~~1. A personal computer data card for insertion into a personal computer to permit
2 data to be transferred between the personal computer and the card, said card comprising:
3 a first layer of a semi-rigid substrate;
4 a second layer of a magnetic medium affixed to said first layer for storing data
5 received from said personal computer such that said second layer covers substantially
6 all of the surface area of a first side of said first layer; and
7 a third layer of protective material affixed to said second layer and permitting
8 access by said personal computer to data on said magnetic medium of said second layer.~~

1 2. The card of claim 1 wherein said card has the storage capacity of
2 approximately 0.75 megabytes of data.

1 3. The card of claim 1 wherein said first layer includes a paper, plastic, or
2 cardstock substrate.

1 4. The card of claim 3 wherein said third layer includes paper, thermoplastic or
2 a paper/synthetic composite.

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1 5. The card of claim 1 further comprising:

2. a fourth layer of a magnetic medium affixed to said first layer for storing data such
3 that said fourth layer covers substantially all of the surface area of a second side of said
4 first layer; and

5 a fifth layer of said protective material affixed to said fourth layer and permitting
6 access to data on said magnetic medium of said fourth layer.

1 6. The card of claim 5 wherein said protective material includes paper having
2 printed text or graphics imprinted on said paper.

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1 7. The card of claim 5 wherein said card has a storage capacity of approximately
2 1.44 megabytes of data.

1 8. The card of claim 5 wherein said third and fifth layers include paper,
2 thermoplastic or a paper/synthetic composite.

1 9. The card of claim 8 wherein said third and fifth layers include paper having
2 printed text or graphics imprinted on said paper.

1 10. An adapter for receiving a stand alone magnetic data card and subsequently
2 being inserted into a floppy disk drive to enable said floppy disk drive to perform data
3 operations on said card comprising:

4 an outer shell having dimensions compatible with said floppy disk drive and at least
5 one window for exposing said card to read/write heads of said floppy disk drive;

6 insertion means for enabling said card to be inserted into and withdrawn from said
7 outer shell;

8 rotation means disposed within said outer shell for rotating said card about an axis
9 perpendicular to the plane of said card within said outer shell;

10 securing means for affixing said card to said rotation means; and

11 alignment means for maintaining alignment of said card during rotation by said
12 rotation means.

1 11. The apparatus of claim 10 wherein said adapter is permanently disposed in
2 said floppy disk drive such that said card is directly inserted into said floppy disk drive to
3 enable said disk drive to perform said data operations via said adapter.

1 12. The adapter of claim 10 wherein said insertion means includes a drawer for
2 holding said card and selectively moving said card laterally into and out of said outer
3 shell; and

4 wherein said drawer includes a window for exposing said card to read/write heads
5 of said floppy disk drive.

1 13. The adapter of claim 10 wherein said outer shell includes a first and second
2 member and said insertion means includes a hinge connecting said first and second

3 members such that said card is inserted and removed from said outer shell in response
4 to said members being pivoted about said hinge.

1 14. The adapter of claim 13 wherein said securing means includes friction gaskets
2 affixed to said first and second members of said outer shell such that said card is
3 disposed between said gaskets on said rotation means.

1 15. The adapter of claim 14 wherein said card includes an opening and said
2 alignment means includes a pin extending from said rotation means and disposed through
3 said opening in said card.

1 16. The adapter of claim 13 wherein said card includes dual openings disposed
2 through said card and said securing and alignment means includes dual pins extending
3 from said rotation means and disposed within said corresponding dual openings disposed
4 through said card.

1 17. A method of storing and retrieving data from personal computer data cards
2 comprising the steps of:

3 (a) affixing a second layer of a magnetic medium to a first layer of a semi-rigid
4 substrate such that said second layer of magnetic medium covers substantially all of the
5 surface area of a first side of said first layer;

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(b) affixing a third layer of protective material to said second layer such that said protective material permits access to data on said magnetic medium of said second layer;
and

(c) storing and retrieving data from said magnetic medium of said second layer.
~~paper including printed text or graphics imprinted on said paper.~~

18. The method of claim 17 further comprising the steps of:

(d) affixing a fourth layer of a magnetic medium to said first layer such that said fourth layer of magnetic medium covers substantially all of the surface area of a second side of said first layer;

(e) affixing a fifth layer of protective material to said fourth layer such that said protective material permits access to data on said magnetic medium of said fourth layer;
and

(f) storing and retrieving data from said magnetic medium of said fourth layer.

19. The method of claim 18 wherein steps (c) and (f) include:
storing up to approximately 1.44 megabytes on said card.

20. A method for utilizing personal computer data cards as storage media for use in a floppy disk drive of a computer, said method comprising the steps of:

(a) inserting said card into an adapter having dimensions compatible to be received in said floppy disk drive;

5 (b) inserting said adapter and inserted card into the compatible floppy disk drive
6 of said computer;

7 (c) rotating said inserted card about an axis perpendicular to the plane of said
8 inserted card within said adapter such that said inserted card traverses read/write heads
9 of said floppy disk drive;

10 (d) securing and aligning said inserted card within said adapter during said
11 rotation;

12 (e) reading and writing said inserted card by said read/write heads of said floppy
13 disk drive;

14 (f) removing said adapter from said disk drive; and

15 (g) removing said inserted card from said adapter.

1 21. The method of claim 20 wherein said adapter includes a drawer and step (a)
2 includes placing said card in said drawer of said adapter and sliding said drawer into said
3 adapter; and

4 step (g) includes sliding said drawer out of said adapter and removing said inserted
5 card from said drawer.

1 22. The method of claim 20 wherein said adapter includes a first and second
2 member attached by a hinge and step (a) includes opening said adapter by moving said
3 first and second members apart via said hinge and placing said card in said adapter, and
4 closing said adapter by moving said first and second members together; and

5 step (g) includes opening said adapter by separating said first and second
6 members via said hinge and removing said inserted card.

1 23. The method of claim 22 wherein said adapter includes friction gaskets
2 disposed in said first and second members and step (a) includes placing said card
3 between said friction gaskets such that said friction gaskets engage said card upon
4 closing said adapter; and

5 step (d) includes said friction gaskets securing said inserted card during rotation.

1 24. The method of claim 23 wherein said card includes an opening, wherein said
2 adapter includes a pin extending from said second member, and step (a) includes placing
3 said card such that said pin extending from said second member is disposed through said
4 opening in said card; and

5 step (d) includes said pin aligning said inserted card with said rotation means
6 during rotation.

1 25. The method of claim 22 wherein said card includes a pair of openings,
2 wherein said adapter includes a first and second member where a pair of pins extend
3 from said second member, and step (a) includes placing said card such that said pair of
4 pins extending from said second member are disposed through said pair of openings in
5 said card; and

6 step (d) includes said pair of pins securing and aligning said inserted card with said
7 rotation means during rotation.

1 26. The method of claim 20 wherein step (c) further includes the steps of:

2 (c.1) rotating said inserted card to a first location to read a code indicating whether
3 or not a personal computer data card is present;

4 (c.2) in response to an absence of the code indicating an absence of a personal
5 computer data card, displaying a message indicating the personal computer data card is
6 not present;

7 (c.3) in response to a code indicating the presence of the personal computer data
8 card, rotating said inserted card to a second location to read data indicating the shape
9 and format of the inserted card; and

10 (c.4) in response to data indicating the shape and format of the inserted card,
11 controlling the read/write heads by the computer, via software control, to properly track
12 said inserted card during said rotation.

1 27. A method for utilizing personal computer data cards as storage media for use
2 in a floppy disk drive of a computer, said method comprising the steps of:

3 (a) inserting said card into an adapter permanently disposed in said floppy disk
4 drive and having dimensions compatible with said floppy disk drive;

5 (b) rotating said inserted card about an axis perpendicular to the plane of said
6 inserted card within said adapter such that said inserted card traverses read/write heads
7 of said floppy disk drive;

8 (c) securing and aligning said inserted card within said adapter during said
9 rotation;

10 (d) reading and writing said inserted card by said read/write heads of said floppy
11 disk drive; and

12 (e) removing said inserted card from said adapter within said disk drive.

1 28. A method for controlling read/write heads of a floppy disk drive of a computer
2 for accessing personal computer data cards comprising the steps of:

3 (a) inserting a disk into said floppy disk drive;

4 (b) rotating said disk to a first location to read a code indicating whether or not said
5 disk is a personal computer data card;

6 (c) in response to an absence of the code indicating an absence of said personal
7 computer data card, displaying a message indicating said disk is not a personal computer
8 data card;

9 (d) in response to the code indicating said disk is said personal computer data
10 card, rotating said disk to a second location to read data indicating the shape and format
11 of the disk; and

12 (e) in response to data indicating the shape and format of the disk, controlling the
13 read/write heads by the computer, via software control, to properly track said disk during
14 rotation.

1 29. The method of claim 28 further including the step of:

2 (f) in response to retrieving encoded data from said disk being said personal
3 computer data card, decoding said encoded data and storing said decoded data in a
4 memory of said computer.

1 30. The method of claim 29 further including the step of:

2 (g) in response to retrieving non-encoded data from said disk being said personal
3 computer data card, ignoring said non-encoded data and retrieving data from a next
4 address on said disk.

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